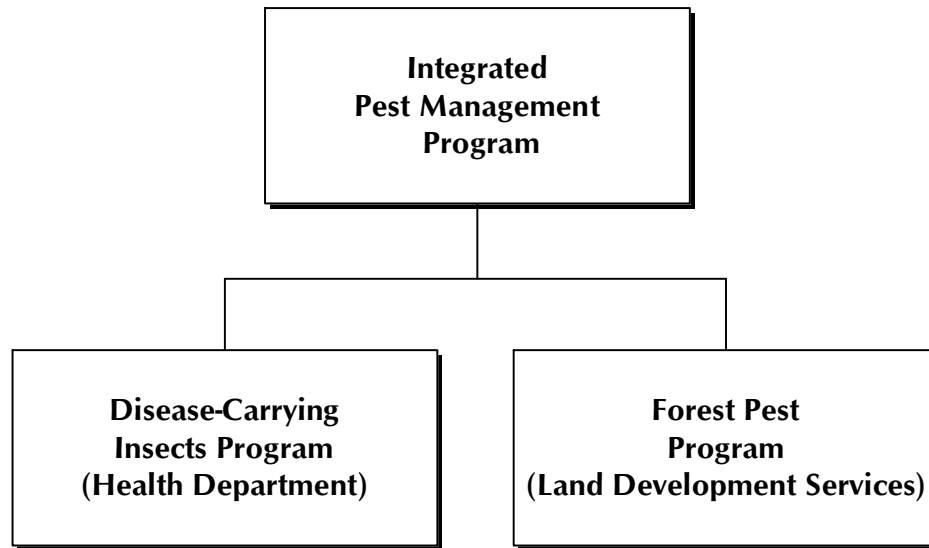


Fund 116

Integrated Pest Management Program



Mission

To suppress forest pest infestation and insect transmitted human disease throughout the County through surveillance, pest and insect control, and public information and education, so that no more than one percent of the County tree cover is defoliated and human morbidity and mortality is minimized while protecting the environment.

Focus

Fund 116, Integrated Pest Management Program, includes two separate programs – the Forest Pest Program managed by Land Development Services (Department of Public Works and Environmental Services) and the Disease-Carrying Insects Program managed by the Health Department. The Forest Pest Program currently focuses on prevention of the spread of gypsy moth caterpillars and cankerworms in the County. The Disease-Carrying Insects Program is focused on controlling the spread of the West Nile virus. The prevention of epidemics and the spread of disease is one of the core functions of the Health Department.

All programs within Fund 116 are funded by a countywide tax levy, which may change annually due to the cyclical nature of the gypsy moth and fall cankerworm populations. For example, the rate was \$0.001 per \$100 assessed value in FY 1997. From FY 1998 through FY 2000, no tax assessment was necessary. For FY 2001, FY 2002 and FY 2003, the Board of Supervisors-approved tax rate was \$0.001 per \$100 assessed value. The FY 2004 tax rate remained at \$0.001 per \$100 assessed value, and provided support for the gypsy moth, cankerworm and West Nile virus activities. In FY 2005, the same tax rate, along with existing fund balance, will continue to support all three activities. FY 2005 revenues are expected to increase by \$237,030 to \$1,358,681, primarily due to increases in residential assessments based on current real estate market activity.

THINKING STRATEGICALLY

Strategic challenges for the Department include:

- o Coordinating inter-jurisdictional and multi-agency activities to maximize program results;
- o Preventing/minimizing the occurrence of West Nile virus cases through surveillance, management, public education activities and inter-jurisdictional cooperation ; and
- o Preventing defoliation from forest pests while minimizing any resulting environmental impacts.

Fund 116

Integrated Pest Management Program

Forest Pest Program

The Forest Pest Program is a cooperative program with the United States Department of Agriculture - Forest Service and the Virginia Department of Agriculture and Consumer Services (VDACS). VDACS maintains a list of insects that are eligible for control by this program. Currently, there are three insects listed by VDACS - the gypsy moth, the fall cankerworm, and the emerald ash borer. The emerald ash borer was added by VDACS to the list of at the end of 2003, following the emergence of this pest in Virginia. The cooperative program investigates tree damage due to forest pests by conducting annual insect monitoring surveys throughout the County. Forested areas with high gypsy moth and cankerworm populations are identified for possible treatment the following spring. The proposed treatment plan and resource requirements for those pests are submitted annually to the Board of Supervisors for approval in February. Treatment is conducted in late April through early May before the gypsy moth and cankerworm can damage trees. Throughout the year, staff educates Fairfax County communities regarding pest suppression methods and measures that they may take to alleviate potential forest pest population explosions.

The emergence of the emerald ash borer in Fairfax County was recently identified by VDACS. In an effort to ensure that the insects did not spread any further, guidance was given by the U.S. Department of Agriculture, Animal Plant Health Inspection Service (APHIS) regarding eradication, and eradication efforts took place in spring 2004 before the adult borers emerged. Those efforts were coordinated among Fairfax County Forest Pest Program staff, APHIS and VDACS. Federal funding for eradication efforts was provided to the state. Forest Pest Program staff will continue to assist in eradication efforts through continued monitoring and surveying of the treated area. The County assistance in these efforts is not expected to have an impact on the Fund 116 balance due to low emerald ash borer populations in FY 2004. However, the impact of this pest within the County will continue to be monitored.

It is noted that the size of pest populations for gypsy moths and cankerworms is cyclical in nature. Populations will be high for a period of years, and then drop for a period, only to rise again. For example, in the early to mid 1990's, annual treatment requirements for the gypsy moth fluctuated from 3,000 to 45,000 acres. Gypsy moth populations have moderated in recent years, with 200 acres treated in FY 2000, 1,800 acres in FY 2001, 5,500 acres in FY 2002 and 2,100 acres in FY 2003. Cankerworm populations have also moderated, with 7,000 acres being treated for cankerworm infestation in FY 2000, 250 acres in FY 2001, 300 acres in FY 2002 and 1,400 acres in FY 2003. Treatment was not necessary in FY 2004. The proposed FY 2005 budget plan provides sufficient capacity to treat 2,500 acres of gypsy moths and 2,500 acres for cankerworms, should the egg mass surveys conducted between August and January of that fiscal year indicate that requirement. Prior to treating, the confirmed number of acres requiring treatment will be presented to the Board of Supervisors for approval.

Disease-Carrying Insects Program

The West Nile virus, transmitted from infected mosquitoes to humans, continues as a public health concern. West Nile virus is well established in the area and its presence is expected to continue to magnify. A continuing effort is needed for disease surveillance, prevention and education of the public on how to protect against mosquitoes. A coordinated, multi-agency mosquito management program is in place, focusing on treating ponds, storm water catch basins and standing water to prevent a proliferation of the mosquito population in order to reduce the public health impact of the virus. Emphasis also is placed on public educational activities to increase citizen awareness of the actions that can be taken for self-protection and to eliminate potential mosquito breeding areas on private property. Inter-jurisdictional cooperation allows for coordinated surveillance and management activities on public property.




Fund 116

Integrated Pest Management Program

This Disease-Carrying Insects Program (West Nile virus activities) was added to Fund 116 as part of the FY 2004 Adopted Budget Plan. At that time, \$1.0 million dollars in support of West Nile virus surveillance and management was appropriated in this fund from fund balance, pending the Board of Supervisor's later adoption in June 2003 of amendments to Appendix I of the Fairfax County Code. The amendments expanded the purpose of the current special service district for infestations of gypsy moths and cankerworms to include insects that may carry a disease that is dangerous to humans. In FY 2004, the \$1.0 million appropriated within Fund 116 was used in combination with \$0.6 million budgeted in the Department of Health (General Fund), for total West Nile virus support of \$1.6 million.



In FY 2005, budgeted program expenditures of \$1.6 million for the West Nile virus program remain the same across the General Fund and Fund 116 budgets. However, General Fund support is decreased by \$503,143, and that amount moves to Fund 116, which has the capacity for additional program support within the current tax structure and existing fund balance. An amount of \$0.1 million remains in the General Fund to meet program needs associated with County areas that are not a part of the special service tax district of the Integrated Pest Management Program.

New Initiatives and Recent Accomplishments in Support of the Fairfax County Vision

 Maintaining Safe and Caring Communities	Recent Success	FY 2005 Initiative	Cost Center
Continue to actively conduct surveillance, treatment, management and educational activities to suppress the transmission of West Nile virus in the bird, mosquito and human populations; and to educate the citizens on how to protect themselves and to use control methods on their own property.	✓	✓	Health Dept. Disease-Carrying Insects Program
 Building Livable Spaces	Recent Success	FY 2005 Initiative	Cost Center
Continue to maintain and protect the forest cover in residential, public and urban environments of Fairfax County. Tree mortality and caterpillar nuisance that result from forest pest infestation make outdoor areas unusable during certain times of the year. Dead trees in public parks and residential areas represent a safety issue that can be avoided. A healthy forest complex, in new and old neighborhoods, is critical in maintaining a quality of life that Fairfax County residence desire.	✓	✓	DPWES Forest Pest Program
 Connecting People and Places	Recent Success	FY 2005 Initiative	Cost Center
Established the Fight-the-Bite website and e-mail address list to provide the public with a more direct route for information on West Nile virus issues and to file complaints and reports on the presence of mosquitoes or suspected infections.	✓		Health Dept. Disease-Carrying Insects Program

Fund 116

Integrated Pest Management Program

 Practicing Environmental Stewardship	Recent Success	FY 2005 Initiative	Cost Center
Continue to utilize Integrated Pest Management (IPM) techniques for gypsy moth and cankerworm control. IPM ensures that pesticide use is minimized and that residents are educated about alternative control options. Forest Pest Program staff monitors pest populations and determines the level of aerial pesticide application necessary, eliminating the need for individual homeowners to spray. The impact is that less spray material is delivered to an area because it is done in a controlled manner.	✓	✓	DPWES Forest Pest Program
 Creating a Culture of Engagement	Recent Success	FY 2005 Initiative	Cost Center
Continue to conduct public meetings and other educational activities on the gypsy moth and cankerworm programs. Extensive effort is made to ensure that residents are aware of County treatment activities and that they have ample opportunity to provide input into the planning process. Activities include items such as making information available via web pages, mailings, fair exhibits and meetings tailored to the citizens' informational needs.	✓	✓	DPWES Forest Pest Program
Continue to enhance the public outreach campaign to elevate the awareness of WNV and of steps individuals can take for personal protection. Educational materials will be distributed and/or made available throughout the County at public meetings, community events and at other targeted locations. Public messages in English and other languages will be disseminated through news releases, interviews and public service announcements via several media outlets. In FY 2005, key educational materials will be available in four languages other than English to reach ethnic groups in the community.	✓	✓	Health Dept. Disease-Carrying Insects Program

Budget and Staff Resources



Agency Summary					
Category	FY 2003 Actual	FY 2004 Adopted Budget Plan	FY 2004 Revised Budget Plan	FY 2005 Advertised Budget Plan	FY 2005 Adopted Budget Plan
Authorized Positions/Staff Years					
Regular	7/ 7	8/ 8	10/ 10	10/ 10	10/ 10
Expenditures:					
Personnel Services	\$284,403	\$416,330	\$416,330	\$678,482	\$678,482
Operating Expenses	197,784	1,565,347	1,480,347	1,823,750	1,823,750
Capital Equipment	0	0	85,000	0	0
Total Expenditures	\$482,187	\$1,981,677	\$1,981,677	\$2,502,232	\$2,502,232

Fund 116

Integrated Pest Management Program

Summary by Program					
Category	FY 2003 Actual	FY 2004 Adopted Budget Plan	FY 2004 Revised Budget Plan	FY 2005 Advertised Budget Plan	FY 2005 Adopted Budget Plan
Forest Pest Program					
Authorized Positions/Staff Years					
Regular	7/ 7	7/ 7	7/ 7	7/ 7	7/ 7
Expenditures	\$482,187	\$981,677	\$981,677	\$999,089	\$999,089
Disease-Carrying Insects Program					
Authorized Positions/Staff Years					
Regular	0/ 0	1/ 1	3/ 3	3/ 3	3/ 3
Expenditures	\$0	\$1,000,000	\$1,000,000	\$1,503,143	\$1,503,143

Position Summary	
<u>FOREST PEST PROGRAM</u>	<u>DISEASE-CARRYING INSECTS PROGRAM</u>
1 Urban Forester III	1 Environment Health Supervisor
1 Urban Forester II	2 Environmental Health Specialists II
3 Urban Foresters I	
1 Info. Technology Tech III	
1 Administrative Assistant II	
<u>TOTAL POSITIONS</u>	
10 Positions / 10.0 Staff Years	

FY 2005 Funding Adjustments

The following funding adjustments from the FY 2004 Revised Budget Plan are necessary to support the FY 2005 program:

- ◆ **Employee Compensation** **\$17,412**
An increase of \$17,412 in salary adjustments necessary to support the County's compensation programs.

- ◆ **Transfer of West Nile Virus Funds From General Fund** **\$503,143**
An increase associated with the move of West Nile virus funds from the Department of Health to Fund 116, based on the capacity of this fund to provide larger support for West Nile virus activities. Total Fund 116 support for the West Nile virus, with this transfer, is \$1,503,143. The amount includes:

An increase of \$244,740 in Personnel Services supported by Fund 116 due primarily to salaries and fringe benefits of three positions redirected since FY 2003 from other agencies to Fund 116 in support of the West Nile virus program. Position support comes from a redirection of contractual dollars previously budgeted in the General Fund for West Nile virus control.

An increase of \$258,403 in Operating Expenses supported by Fund 116, which provides for an expansion in the number of catch basins treated in FY 2005 by redirecting Operating Expense dollars previously budgeted in the General Fund.

Board of Supervisors' Adjustments

The following funding adjustments reflect all changes to the FY 2005 Advertised Budget Plan, as approved by the Board of Supervisors on April 26, 2004:

- ◆ The Board of Supervisors made no adjustments to this fund.

Fund 116

Integrated Pest Management Program

Changes to FY 2004 Adopted Budget Plan

The following funding adjustments reflect all approved changes in the FY 2004 Revised Budget Plan since passage of the FY 2004 Adopted Budget Plan. Included are all adjustments made as part of the FY 2003 Carryover Review and all other approved changes through December 31, 2003:

◆ **Position Adjustments**

During FY 2004, the County Executive approved the redirection of 2/2.0 SYE positions to Fund 116 to support the West Nile virus program, as a result of Department of Public Works and Environmental Services positions being identified for realignment. These Environmental Health Specialists will be responsible for conducting West Nile virus trapping and testing activities, field surveys and evaluations, and complaint response. No corresponding funding adjustment was required in FY 2004 as these positions will assume responsibilities previously funded under contracted services.

The following funding adjustments reflect all approved changes to the FY 2004 Revised Budget Plan from January 1, 2004 through April 19, 2004. Included are all adjustments made as part of the FY 2004 Third Quarter Review:

- ◆ The Board of Supervisors made no adjustments to this fund.

Key Performance Measures

Objectives

- ◆ To control the infestation of gypsy moths and cankerworms through detection and abatement programs so that no more than 1 percent of County tree cover is defoliated in a given year.
- ◆ To suppress the transmission of West Nile virus from infected mosquitoes to the human population, holding the number of human infections to 10, which is less than the 13 experienced in FY 2003.

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2001 Actual	FY 2002 Actual	FY 2003 Estimate/Actual	FY 2004	FY 2005
Output:					
Gypsy moth/cankerworm field surveys completed annually in areas known or suspected to be infested	3,200	3,200	3,200 / 3,200	3,200	3,200
Mosquito larvicide treatments of catch basins to control West Nile virus	0	22,615	NA / 66,879	150,000	200,000
Efficiency:					
Gypsy moth/cankerworm field surveys conducted per staff	800	800	800 / 800	800	800
West Nile virus program costs per capita	NA	\$0.30	NA / \$0.71	\$1.85	\$1.50
Service Quality:					
Percent of County households in gypsy moth and cankerworm treatment areas notified of abatement efforts	100%	100%	100% / 100%	100%	100%

Fund 116

Integrated Pest Management Program

Indicator	Prior Year Actuals			Current Estimate	Future Estimate
	FY 2001 Actual	FY 2002 Actual	FY 2003 Estimate/Actual	FY 2004	FY 2005
Percent of targeted catch basin areas treated with mosquito larvicide within the scheduled timeframe	NA	100%	NA / 100%	100%	90%
Outcome:					
Percent of County tree defoliation resulting from gypsy moth and cankerworm infestation	0%	0%	1% / 0%	1%	1%
Confirmed human cases of West Nile virus in Fairfax County, Fairfax City, and Falls Church City as reported by VDH (1)	0	0	NA / 13	4	10

(1) VDH = Virginia Department of Health

Performance Management Results

Gypsy Moth/Cankerworm: In FY 2003, there were 2,100 acres treated for the gypsy moth caterpillar and 1,400 acres for the fall cankerworm. Staff surveys for caterpillars and egg masses conducted in mid-summer and early fall indicate that the treatment for gypsy moth was successful. Surveys for the fall cankerworm cannot be conducted until mid-winter; however, early evidence indicates that the treatment was successful as well. Defoliation surveys for both insects conducted this summer indicated that there was no defoliation in Fairfax County during this time frame.

West Nile Virus (WNV) control is in its third year. The goal in FY 2005 is to hold the number of human cases as reported by the Virginia Department of Health to 10 cases, a number lower than the 13 cases reported for the County in FY 2003. This number is higher than the anticipated FY 2004 experience, when the County benefited from the unseasonably cool weather and very heavy spring rains flushing through storm water catch basins and inhibiting mosquitoes from breeding.

The County has a comprehensive mosquito surveillance and management program that utilizes an integrated pest management, and multi-agency, approach to suppress the mosquito population and the transmission of WNV in the mosquito, bird and human populations. Storm water catch basins, a significant breeding area for mosquitoes, are treated with larvicide. Surveillance activity is conducted by the County to determine mosquito breeding locations and the degree of presence of the disease in County mosquitoes and birds. A limited number of catch basin larvicide treatments were initiated at the end of FY 2002, when the disease first emerged in the County. The number of catch basin treatments has steadily expanded each year through FY 2005, when 4 treatment cycles totaling 200,000 catch basins are projected to ensure the aggressive suppression of the disease. This level assumes the capacity for treatment response if there is a warm spring, which would encourage mosquito breeding. As previously mentioned, the number of mosquito larvicide catch basin treatments was low in FY 2003 due to the very rainy spring which made it impossible to move forward with a major treatment cycle at the end of the fiscal year. The number catch basin treatments are also held down in FY 2004, due again to the same cool wet spring which delayed the emergence of the mosquito population. This also may have had a positive impact in reducing the number of FY 2004 human West Nile virus cases as compared to the previous year. The cost per capita reflects the combined funding for West Nile virus activities provided under the Department of Health (General Fund) and Fund 116, Integrated Pest Management Program.

Fund 116

Integrated Pest Management Program

FUND STATEMENT

Fund Type G10, Special Revenue Funds

Fund 116, Integrated Pest Management Program

	FY 2003 Actual	FY 2004 Adopted Budget Plan	FY 2004 Revised Budget Plan	FY 2005 Advertised Budget Plan	FY 2005 Adopted Budget Plan
Beginning Balance	\$1,283,581	\$1,358,650	\$2,003,577	\$1,143,551	\$1,143,551
Revenue:					
General Property Taxes	\$1,171,028	\$1,098,581	\$1,098,581	\$1,335,611	\$1,335,611
Interest on Investments	22,013	23,070	23,070	23,070	23,070
Miscellaneous Revenues	9,142	0	0	0	0
Total Revenue	\$1,202,183	\$1,121,651	\$1,121,651	\$1,358,681	\$1,358,681
Total Available	\$2,485,764	\$2,480,301	\$3,125,228	\$2,502,232	\$2,502,232
Expenditures:					
Forest Pest Program	\$482,187	\$981,677	\$981,677	\$999,089	\$999,089
Disease-Carrying Insects Program	0	1,000,000	1,000,000	1,503,143	1,503,143
Total Expenditures	\$482,187	\$1,981,677	\$1,981,677	\$2,502,232	\$2,502,232
Total Disbursements	\$482,187	\$1,981,677	\$1,981,677	\$2,502,232	\$2,502,232
Ending Balance¹	\$2,003,577	\$498,624	\$1,143,551	\$0	\$0
Tax Rate Per \$100 of Assessed Value	\$0.001	\$0.001	\$0.001	\$0.001	\$0.001

¹Ending balances have steadily decreased in this fund since FY 2003 due to the addition of the Disease-Carrying Insects Program to prevent the spread of the West Nile virus and due to projected expanded treatment requirements of the gypsy moth and cankerworm programs.